



1631

~~03-60~~  
CD-ROM  
PATENT  
2750-1026P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: N.ALEXANDROV et al. Conf.: 5385 /  
Appl. No.: 09/671,635 Group: UNASSIGNED  
Filed: September 28, 2000 Examiner: UNASSIGNED  
For: SEQUENCE DETERMINED DNA FRAGMENTS AND  
CORRESPONDING POLYPEPTIDES ENCODED THEREBY

PETITION TO REVIVE PATENT APPLICATION

Assistant Commissioner for Patents  
Washington, DC 20231

October 19, 2001

Sir:

In response to the Notice of Incomplete Reply mailed September 19, 2001, Applicants believe that the above-identified application has become abandoned. A Notice of Incomplete Reply was mailed on September 19, 2001 and sets a response date of September 1, 2001, eighteen days before the Notice was mailed. Therefore, Applicants believe that this application has become abandoned in error and respectfully petition to revive the application.

On February 1, 2001, the USPTO issued a Notice to File Missing Parts in this application, setting a date for response of April 1, 2001, extendable to September 1, 2001. On June 1, 2001, Applicants filed an appropriate, complete response to the Notice to File Missing Parts. That response included; a signed declaration and power of attorney, two CDs (in lieu of the paper copy) and CRF of a Sequence Listing and a petition for a two month extension of time. On September 19, 2001, the USPTO mailed a Notice of Incomplete Reply, which set as the period for response the end of the original time

period set in the Notice to File Missing Parts. That entire response period expired September 1, 2001.

As evidence of the statements made above, Applicants are submitting herewith the following:

- 1) a copy of the Notice to File Missing Parts mailed February 1, 2001.
- 2) a copy of the Reply filed June 1, 2001
- 3) a copy of the postcard receipt which was date stamped on June 1, 2001.
- 4) a copy of the Notice of Incomplete Reply mailed September 19, 2001.

Applicants submit that the reply filed on June 1, 2001 was a "bona fide" attempt to respond to the original Notice to File Missing Parts of Nonprovisional Application mailed February 1, 2001 and therefore a new time period to respond should have been set in the Notice of Incomplete Reply.

Regardless of the incorrect response date set by the Notice mailed September 19, 2001, Applicants are submitting herewith a Substitute Sequence Listing and Amendment to respond to the errors outlined in the Notice of Incomplete Reply.

If this application has indeed become abandoned, Applicants request that the application be immediately returned to pending status so that prosecution may resume with full consideration and entry into the record of the timely filed Reply.

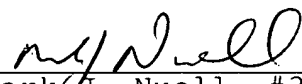
If the U.S. Patent Examiner has any questions regarding the above matters, please contact Applicants' representative, Dr. Mark Nuell, Reg. No. 36,623 in the Washington metropolitan area at 703-205-8000.

It is submitted that no fees are required for filing this Petition, since the error occurred because of a mistake on the part of the USPTO.

However, if deemed necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By   
Mark U. Nuell, #36,623

RCS/DRN/BCF  
2750-1026P

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachments:

a copy of the Notice to File Missing Parts mailed February 1, 2001.,  
a copy of the Reply filed June 1, 2001,  
a copy of the postcard receipt which was date stamped on June 1, 2001,  
a copy of the Notice of Incomplete Reply mailed September 19, 2001,  
an amendment submitting the Substitute Sequence Listing which complies with 37 C.F.R. 1.822 and/or 1.833 as requested by the Notice of Incomplete Reply.

(Rev. 09/23/01)



COPY

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/671,635	09/28/2000	Nickolai Alexandrov	2750-1026P

2292  
BIRCH STEWART KOLASCH & BIRCH  
8110 GATEHOUSE ROAD  
SUITE 500 EAST  
FALLS CHURCH, VA 22042

## FORMALITIES LETTER



\*OC000000005725316\*

Date Mailed: 02/01/2001

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

*Filing Date Granted*

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.  
*A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.*
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.
- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821 - 1.825 for the following reason(s):
  - This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 CFR 1.821(c).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-1123
- For CRF Submission Help, call (703) 308-4212
- PatentIn Software Program Support
- - For Technical Assistance, call (703) 287-0200
- - To Purchase PatentIn Software, call (703) 306-2600

- The balance due by applicant is \$ 65.

COPY

*A copy of this notice **MUST** be returned with the reply.*

*BK T-6*

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



**COPY** BOX MISSING PARTS  
PATENT  
2750-1026P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Nickolai ALEXANDROV et al. Conf: 5385  
Appl. No.: 09/671,635 Group: UNASSIGNED  
Filed: September 28, 2000 Examiner: UNASSIGNED  
For: SEQUENCE-DETERMINED DNA FRAGMENTS AND  
CORRESPONDING POLYPEPTIDES ENCODED  
THEREBY

**THIS IS NOT A NEW PATENT APPLICATION**

LETTER SUBMITTING DOCUMENTS  
FOR COMPLETION OF AN APPLICATION  
PURSUANT TO 37 C.F.R. § 1.53(f) and/or § 1.53(d)

**BOX MISSING PARTS**

Assistant Commissioner for Patents  
Washington, DC 20231

June 1, 2001

Sir:

The application papers for the above-identified application were originally filed on September 28, 2000 and the application was assigned Appl. No. 09/671,635.

**DOCUMENTATION**

- ☒ Under the provisions of 37 C.F.R. §§ 1.41(c) and 1.53(f), attached hereto is the executed Declaration and Power of Attorney of the inventor(s) (☒ original ☐ photocopy), necessary for completing the filing requirements in connection with the above-identified application.
- ☐ Under the provisions of 37 C.F.R. §§ 1.41(c) and 1.53(f), attached hereto is the executed Declaration that was attached to the specification at the time of execution. The attached specification is a true copy of the specification that was filed in the U.S. Patent and Trademark office on September 28, 2000, including any amendments thereto (if applicable) filed on even date therewith.

# COPY

Appl. No. 09/671,635

- ☒ The undersigned hereby declares that "Attorney Docket No. 2750-1026P on page 1 of the inventors' Declaration and Power of Attorney, filed on June 1, 2001, corresponds to Appl. No. 09/671,635, filed September 28, 2000, entitled 'SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES ENCODED THEREBY.'"
- ☐ Attached are \_\_\_\_\_ ( ) sheet(s) of formal drawings.
- ☒ Attached is a copy of the Notice to File Missing Parts of Nonprovisional Application.
- ☐ Attached is an English language translation of the above-identified application that was filed in a foreign language.
- ☐ See the attached Translator's Verification; or
- ☐ The undersigned states that the English translation attached hereto is a true and correct translation of the application as originally filed in a foreign language.
- ☐ Attached hereto is a Statement Claiming Small Entity Status (☐ original ☐ photocopy).
- ☐ Submitted concurrently herewith **under separate cover** for recording is an Assignment.

## FEES

The Government Filing Surcharge(s) (37 C.F.R. § 1.16(e) and/or § 1.17(k)) and the basic Government Filing Fee(s) (37 C.F.R. § 1.16(a)-(d)) (if applicable) is/are paid by deposit account and calculated as follows:

- ☐ Basic Filing Fee(s): \$0.00 (37 C.F.R. § 1.16(a)-(d))
- ☒ The Government Filing Surcharge under 35 U.S.C. § 1.16(e) for late filing of filing fee, oath and/or declaration:
- ☐ Large Entity - \$130.00
- ☒ Small Entity - \$ 65.00)
- ☐ The Government Filing Surcharge under 37 C.F.R. § 1.17(k) for filing of translation of non-English Specification in the amount of \$130.00:
- ☐ was previously paid for concurrently with the filing of the application on
- ☐ is paid by deposit account.

# COPY

Appl. No. 09/671,635

- ☐ No extension fee is required because the undersigned has not yet received the Notice to File Missing Parts of Nonprovisional Application. However, if for some reason it is determined that an extension of time is necessary, applicant hereby respectfully petitions for an extension of time for the filing of the present paper in accordance with the provisions of 37 C.F.R. § 1.136 and 37 C.F.R. § 1.17.
- ☒ Applicant hereby respectfully petitions for a two (2) month(s) extension of time for the filing of the present paper in accordance with the provisions of 37 C.F.R. § 1.136 and 37 C.F.R. § 1.17. The required fee of \$195.00 is paid by deposit account.
- ☐ A check in the amount of \$0.00 to cover the basic filing fee(s), surcharge fee(s), and any extension of time fees (if applicable) is enclosed.
- ☒ Please charge Deposit Account No. 50-1055 in the amount of \$260.00. A triplicate copy of this transmittal form is enclosed.

If the Primary Deposit Account No. 50-1055 is deficient and non-payment will result in a loss of rights, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By *Raymond C. Stewart* #36,623  
Raymond C. Stewart, #21,066

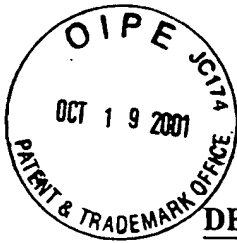
RCS/DRN/BCF  
2750-1026P

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachments

(Rev. 10/23/2000)





COPY

PATENT

Atty. Docket No. 2750-1026P

Client Docket No. 00106.002

Application No. 09/671,635

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: Sequence-Determined DNA Fragments and Corresponding Polypeptides Encoded Thereby

the specification of which (check one) ☐ is attached hereto ☒ was filed on 9/28/00 as Application Serial No. 09/671,635, and was amended on      (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
Number	Country	Day/Month/Year Filed	Yes	No

I hereby claim the benefit under Title 35, United States Code, §120 and/or §119(e) of any United States application(s) and/or provisional applications listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application	Status	
Serial No.	Filing Date	Patented, Pending, Abandoned
60/156,458	9/28/99	Pending

I hereby declare that all statements herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

COPY

PATENT

Atty. Docket No. 2750-1026P

Client Docket No. 00106.002

Application No. 09/671,635

Full name of sole or first inventor Nickolai ALEXANDROV

Inventor's signature

N. Alexandrov

Date

12/8/00

Residence Thousand Oaks, CA USA

Citizenship Russia

Post Office Address 1404 Oak Trail Street, Thousand Oaks, CA 91320 USA

Full name of second inventor Maxim TROUKHAN

Inventor's signature

M. Troukhan

Date

11/29/00

Residence Agoura Hills, CA USA

Citizenship Russia

Post Office Address 29425 Hillrise Drive, Agoura Hills, CA 91301 USA



PATENT  
Atty. Docket No. 2750-1026P  
Client Docket No. 00106.002  
Application No. 09/671,635

Full name of third inventor Vyacheslav BROVER

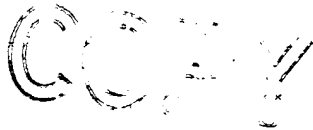
Inventor's signature

Date 1/9/2001

Residence Calabasas, CA USA

Citizenship Russia

Post Office Address 5916 N. Las Virgenes Road #590, Calabasas, CA 91302 USA



PATENT  
Attorney Docket No. 2750-1026P  
Client Docket No. 00106.002  
Application No. 09/671,635

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Nickolai ALEXANDROV et al.

Serial No.: 09/671,635

Group Art: Unassigned

Filed: 9/28/00

Examiner: Unassigned

For: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING  
POLYPEPTIDES ENCODED THEREBY

**POWER OF ATTORNEY**

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §1.36, Ceres, Incorporated, the Assignee of the above-identified patent application hereby appoints the following attorneys and agents to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith.

Ling-Fong Chung – Reg. No. 36,482  
Raymond C. Stewart – Reg. No. 21,066  
Joseph A. Kolasch – Reg. No. 22,463  
Bernard L. Sweeney – Reg. No. 24,448  
Charles Gorenstein – Reg. No. 29,271  
Leonard R. Svensson – Reg. No. 30,330  
Andrew D. Meikle – Reg. No. 32,868  
Joe McKinney Muncy – Reg. No. 32,334  
John W. Bailey – Reg. No. 32,881

Terrell C. Birch – Reg. No. 19,382  
James M. Slattery – Reg. No. 28,380  
Michael K. Mutter – Reg. No. 29,680  
Gerald M. Murphy, Jr. – Reg. No. 28,977  
Terry L. Clark – Reg. No. 32,644  
Marc S. Weiner – Reg. No. 32,181  
Donald J. Daley – Reg. No. 34,313  
John A. Castellano – Reg. No. 35,094  
Mark Nuell – Reg. No. 36,623

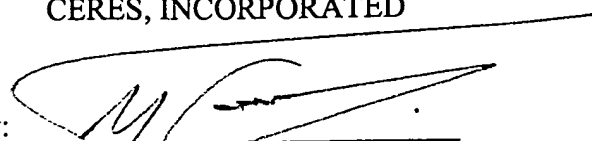
Please direct all correspondence and telephone calls regarding this application to the following:

Birch, Stewart, Kolasch & Birch, LLP or Customer No. 2292  
P.O. Box 747, Falls Church, Virginia 22040-0747  
Telephone: (703) 205-8000 · Fax (703) 205-8050

CERES, INCORPORATED

Dated: December 13, 2000

By:

  
Mark A. Vaeck  
Chief Operations Officer



**COPY** BOX SEQUENCE  
PATENT  
2750-1026P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Nickolai ALEXANDROV et al. Conf: 5385  
Appl. No.: 09/671,635 Group: UNASSIGNED  
Filed: September 28, 2000 Examiner: UNASSIGNED  
For: SEQUENCE-DETERMINED DNA FRAGMENTS AND  
CORRESPONDING POLYPEPTIDES ENCODED  
THEREBY

**SMALL ENTITY TRANSMITTAL FORM**

Assistant Commissioner for Patents  
Washington, DC 20231

June 1, 2001

Sir:

Transmitted herewith is an amendment in the above-identified application.

**A Verified Statement Claiming Small Entity Status**

☐ is submitted herewith (☐ Original ☐ Photocopy).

☒ was previously submitted on September 28, 2000.

☐ The enclosed document is being transmitted via the Certificate of Mailing provisions of 37 C.F.R. § 1.8.

☐ The enclosed document is being transmitted via facsimile.

The following items are additionally transmitted herewith along with the amendment:

☒ Two (2) identical CD-Rs, as required by §1.52(e)(4), created using IBM-PC, MS-Windows operating system. The files contained on the CD-R are as follows:

File Name	Date of Creation	File Size
2750-1026P.ST25	May 31, 2001	106

☒ One (1) CD-R, as required by §1.821(e), containing the Computer Readable Form (CRF) of the Sequence Listing created using IBM-PC, MS-Windows operating system. The files contained on the CD-R are as follows:

File Name	Date of Creation	File Size
2750-1026P.ST25	May 31, 2001	106

# COPY

Appl. No. 09/671,635

- ☒ Substitute Specification, excluding Table 1 and the claims, submitted in clean form without markings under 37 C.F.R. §1.125(c)
- ☒ Marked-up copy of the substitute specification, excluding Table 1 and the claims, under 37 C.F.R. §1.125(b)(2)
- ☒ Copy of Notice to File Missing Parts

The fee has been calculated as shown below:

	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA	RATE	ADDITIONAL FEE
TOTAL	50	-	50	=	0	\$ 9	\$0.00
INDEPENDENT	5	-	5	=	0	\$ 40	\$0.00
___ FIRST PRESENTATION OF A MULTIPLE CLAIM						\$135	\$0.00
						TOTAL	\$0.00

- ☒ A two (2) month(s) extension of time for the filing of the present paper in accordance with the provisions of 37 C.F.R. §1.136 and 37 C.F.R. §1.17 has been petitioned for and the applicable fees have been paid in the accompanying response to the Notice to File Missing Parts filed on June 1, 2001 for the present application number.
- ☐ No fee is required.
- ☐ Please charge Deposit Account No. 50-1055 in the amount of \$0.00. This form is submitted in triplicate.

If the Primary Deposit Account No. 50-1055 is deficient and non-payment will result in a loss of rights, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By *Raymond C. Stewart* 36623  
 Raymond C. Stewart, #21,066  
 P.O. Box 747  
 Falls Church, VA 22040-0747  
 (703) 205-8000

RCS/DRN/BCF  
 2750-1026P  
 Attachments



**COPY** BOX SEQUENCE  
PATENT  
2750-1026P

IN THE U.S. PATENT AND TRADEMARK OFFICE

**Compact Disk TRANSMITTAL LETTER**

Applicant: Nickolai ALEXANDROV et al. Conf: 5385  
Appl. No.: 09/671,635 Group: UNASSIGNED  
Filed: September 28, 2000 Examiner: UNASSIGNED  
For: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING  
POLYPEPTIDES ENCODED THEREBY

The application identified above contains two (2) identical CD-Rs created using IBM-PC, MS-Windows operating system. The files contained on the CD-R are as follows:

File Name	Date of Creation	File Size
2750-1026P.ST25	May 31, 2001	106

Additionally the application contains one (1) CD-R, as required by §1.821(e), containing the Computer Readable Form (CRF) of the Sequence Listing created using IBM-PC, MS-Windows operating system. The files contained on the CD-R are as follows:

File Name	Date of Creation	File Size
2750-1026P.ST25	May 31, 2001	106

If there are any problems concerning the Compact Disk Submission, please contact the undersigned at telephone number 703-205-8000 or by facsimile at 703-205-8050.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By *Raymond C. Stewart* #36,623 Date: 06/01/2001  
Raymond C. Stewart, #21,066  
P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

RCS/DRN/BCF  
2750-1026P  
Attachments



**COPY** BOX SEQUENCE  
PATENT  
2750-1026P

IN THE U.S. PATENT AND TRADEMARK OFFICE

APPLICANT(S): Nickolai ALEXANDROV et al.  
APPLICATION NO.: 09/671,635 GROUP: UNASSIGNED  
FILED: September 28, 2000 EXAMINER: UNASSIGNED  
FOR: SEQUENCE-DETERMINED DNA FRAGMENTS AND  
CORRESPONDING POLYPEPTIDES ENCODED THEREBY

AMENDMENT

Honorable Commissioner of Patents  
Washington, D.C. 20231

June 1, 2001

Sir:

In response to the Notice to File Missing Parts of Nonprovisional Application mailed February 1, 2001, the following amendments and remarks are respectfully submitted in connection with the above-identified application.

IN THE SPECIFICATION AND CLAIMS

Please remove Table 1 and the claims from the original specification of record, and insert them into the substitute specification immediately prior to the schematic which appears on page 1095. Please renumber the pages of Table 1 and the claims consecutively beginning with page 1090 of the substitute specification.



REMARKS

COPY

Application No. 09/671,635

*Sequence Listing*

Enclosed herewith in full compliance to 37 C.F.R. §§1.821-1.825 is a Sequence Listing submitted on two (2) identical CD-Rs under 37 C.F.R. §1.821(c) in place of the paper copy. The computer readable form of the Sequence Listing is submitted herewith on one (1) additional CD-R as required by §1.821(e). These three (3) identical CD-R copies of the Sequence Listing, file "2750-1026P.ST25.txt", in no way introduce new matter into the specification.

*Substitute Specification*

A substitute specification, excluding Table 1 and the claims, is being respectfully submitted under 37 C.F.R §1.125 (b). This substitute specification in no way introduces new matter into the application.

As required under 37 C.F.R. §1.125(b)(2), a marked-up copy of the substitute specification, excluding Table 1 and the claims, is enclosed herewith showing the matter being added to and the matter being deleted from the specification of record. Also enclosed herewith is a substitute specification, excluding Table 1 and the claims, required under 37 C.F.R. §1.125(c), submitted in a clean form without markings as to amended material.

The substitute specification, excluding Table 1 and the claims, is submitted to reference the sequences containing four or more amino acids disclosed in the specification by their SEQ ID NOS. Submitting a substitute specification, excluding Table 1 and the claims, gives the Patent Office the advantage of saving the time needed to enter the large volume of amendments in the specification and reducing the number of printing errors. No new matter is introduced by these

amendments.

A Two (2) month(s) extension of time for the filing of the present paper in accordance with the provisions of 37 C.F.R. §1.136 and 37 C.F.R. §1.17 has been petitioned for and the applicable fees have been paid in the accompanying response to the Notice to File Missing Parts filed on June 1, 2001 for the present application number.

If the Primary Deposit Account No. 50-1055 is deficient and non-payment will result in a loss of rights, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,  
BIRCH, STEWART, KOLASCH & BIRCH, LLP

By Raymond C. Stewart #36,623  
Raymond C. Stewart, #21,066  
P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachments: One (1) CD-R of computer readable form of the Sequence Listing  
Two (2) CD-Rs of the Sequence Listing in place of the Paper Copy  
Clean Form of Substitute Specification  
Marked-up Copy of Substitute Specification  
Copy of Notice to File Missing Parts of Nonprovisional Application

RCS/DRN/BCF



Papers Filed herewith on: June 1, 2001  
DOCKET NO.: 2750-1026P ATTY.: RCS/DRN  
APPLICANT(S): N. ALEXANDROV et al  
APPLN. NO.: 09/471,635 FILED: 9-28-2000  
PAT NO.: \_\_\_\_\_

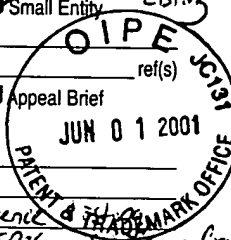
- ☐ New Application with Transmittal Letter  
☐ Utility ☐ Design ☐ CIP ☐ PCT ☐ Provisional  
☐ Filing Under 37 CFR 1.53(b) ☐ CONT ☐ DIV  
☐ Filing Under 37 CFR 1.53(d) (CPA)  
☐ Filing Under 37 CFR 1.114(RCE)  
☐ Specification Consisting of: \_\_\_\_\_ pages  
☐ Combined Declaration & Power of Attorney  
☐ Assignment / Cover Letter  
☐ Letter to Official Draftsman  
☐ Drawings \_\_\_\_\_ Sheets ☐ Formal ☐ Informal ☐ Red-Ink  
☒ Completion of Filing Requirements, PCT/DO/EO/905  
or Formalities Letter and Executed Declaration  
☐ Priority Document(s) / Cover Letter, No. Doc. \_\_\_\_\_  
☒ Amendment: for substitute spec + sequence  
☒ Transmittal Ltr ☐ Large Entity ☒ Small Entity L3/mj  
☐ Response \_\_\_\_\_  
☐ Information Discl Stmt. PTO-1449(s) \_\_\_\_\_ ref(s)  
☐ Notice of Appeal ☐ Appeal Brief  
☐ Issue Fee Transmittal  
☐ FEES: \_\_\_\_\_  
☐ Letter: \_\_\_\_\_

☒ Other: 3 CDs with sequence & figures  
Marked up copy of sub spec, sup. spec, first  
CD transmittal, copy of notice to comply

Receipt is hereby acknowledged of the papers filed as  
indicated in connection with the above identified case.  
COMMISSIONER OF PATENTS AND TRADEMARKS

Due Date: \_\_\_\_\_  
Handcarry: \_\_\_\_\_

DOCKET NO. 2750-1026P





## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

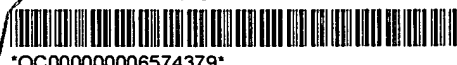
APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/671,635	09/28/2000	Nickolai Alexandrov	2750-1026P

2292  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

COPY

CONFIRMATION NO. 5385

FORMALITIES LETTER



\*OC000000006574379\*

Date Mailed: 09/19/2001

## NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

## Filing Date Granted

The U.S. Patent and Trademark Office has received your reply on to the Notice mailed and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or [patin3help@uspto.gov](mailto:patin3help@uspto.gov)

*A copy of this notice MUST be returned with the reply.*

Customer Service Center  
Initial Patent Examination Division (703) 308-1202



BOX SEQUENCE  
PATENT  
2750-1026P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Nickolai ALEXANDROV et al.

Appl. No.: 09/671,635 Group: UNASSIGNED

Filed: September 28, 2000 Examiner: UNASSIGNED

For: SEQUENCE-DETERMINED DNA FRAGMENTS AND  
CORRESPONDING POLYPEPTIDES ENCODED  
THEREBY

### SMALL ENTITY TRANSMITTAL FORM

Assistant Commissioner for Patents  
Washington, DC 20231

October 19, 2001

Sir:

Transmitted herewith is an amendment in the above-identified application.

#### A Verified Statement Claiming Small Entity Status

☐ is submitted herewith (☐ Original ☐ Photocopy).

☒ was previously submitted on September 28, 2000.

☐ The enclosed document is being transmitted via the Certificate of Mailing provisions of 37 C.F.R. § 1.8.

☐ The enclosed document is being transmitted via facsimile.

The following items are additionally transmitted herewith along with the amendment:

☒ Two (2) identical CD-Rs, as required by §1.52(e)(4), created using IBM-PC, MS-Windows operating system. The files contained on the CD-R are as follows:

File Name	Date of Creation	File Size
2750-1026P.ST25	October 19, 2001	153 KB

☒ One (1) CD-R, as required by §1.821(e), containing the Computer Readable Form (CRF) of the Sequence Listing created using IBM-PC, MS-Windows operating system. The files contained on the CD-R are as follows:

File Name	Date of Creation	File Size
2750-1026P.ST25	October 19, 2001	153 KB

- ☐ One (1) CD-R, as required under 37 C.F.R. §1.121, containing a marked-up copy of the amended file. The files contained on the CD-R are as follows:

File Name	Date of Creation	File Size

- ☒ Copy of the Notice of Incomplete Reply

The fee has been calculated as shown below:

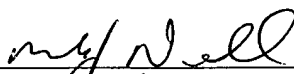
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA	RATE	ADDITIONAL FEE
TOTAL	50	-	50	=	0	\$ 9	\$0.00
INDEPENDENT	5	-	5	=	0	\$ 40	\$0.00
___ FIRST PRESENTATION OF A MULTIPLE CLAIM						\$135	\$0.00
						TOTAL	\$0.00

- ☐ A ( ) month(s) extension of time for the filing of the present paper in accordance with the provisions of 37 C.F.R. §1.136 and 37 C.F.R. §1.17 has been petitioned for and the applicable fees have been paid in the accompanying response to the Notice to File Missing Parts filed on October 19, 2001 for the present application number.
- ☒ No fee is required.
- ☐ Please charge Deposit Account No. 50-1055 in the amount of \$0.00. This form is submitted in triplicate.

If the Primary Deposit Account No. 50-1055 is deficient and non-payment will result in a loss of rights, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By   
 Mark J. Nuell, # 36,623  
 P.O. Box 747  
 Falls Church, VA 22040-0747  
 (703) 205-8000

RCS/DRN/BCF  
 2750-1026P  
 Attachments



IN THE U.S. PATENT AND TRADEMARK OFFICE

**Compact Disk TRANSMITTAL LETTER**

Applicant: Nickolai ALEXANDROV et al.

Appl. No.: 09/671,635

Group: UNASSIGNED

Filed: September 28, 2000

Examiner: UNASSIGNED

For: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING  
POLYPEPTIDES ENCODED THEREBY

The application identified above contains two (2) identical CD-Rs created using IBM-PC, MS-Windows operating system. The files contained on the CD-R are as follows:

File Name	Date of Creation	File Size
2750-1026P.ST25	October 19, 2001	153 KB

The application also contains one (1) CD-R, as required by §1.821(e), containing the Computer Readable Form (CRF) of the Sequence Listing created using IBM-PC, MS-Windows operating system. The files contained on the CD-R are as follows:

File Name	Date of Creation	File Size
2750-1026P.ST25	October 19, 2001	153 KB

If there are any problems concerning the Compact Disk Submission, please contact the undersigned at telephone number 703-205-8000 or by facsimile at 703-205-8050.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By Mark J. Nuell Date: 10/19/2001  
Mark J. Nuell, # 36,623

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

RCS/DRN/BCF  
2750-1026P  
Attachments



BOX SEQUENCE  
PATENT  
2750-1026P

IN THE U.S. PATENT AND TRADEMARK OFFICE

APPLICANT(S): Nickolai ALEXANDROV et al.

APPLICATION NO.: 09/671,635

GROUP: UNASSIGNED

FILED: September 28, 2000

EXAMINER: UNASSIGNED

FOR: SEQUENCE-DETERMINED DNA FRAGMENTS AND  
CORRESPONDING POLYPEPTIDES ENCODED THEREBY

#### AMENDMENT

Honorable Commissioner of Patents  
Washington, D.C. 20231

October 19, 2001

Sir:

In response to the Notice of Incomplete Reply mailed September 19, 2001, the following amendments and remarks are respectfully submitted in connection with the above-identified application.

*In the Specification:*

Please replace the paragraph and table beginning on page 1 line 5 with the following amended paragraph and table:

-- This application contains a CDR, the entire contents of which are hereby incorporated by reference. The CDR contains the following files:

File Name	Date of Creation	File Size
2750-1026P.ST25	October 19, 2001	153 KB

--



IN THE SPECIFICATION:

Please delete the Sequence Listing of record and insert the Compact Disks labeled "Copy 1" and "Copy 2" which contain paper copies of the Substitute Sequence Listing in its place. (37 C.F.R. 1.52e)

**REMARKS**

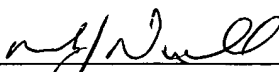
*Sequence Listing*

Enclosed herewith in full compliance to 37 C.F.R. §§1.821-1.825 is a Substitute Sequence Listing submitted on two (2) identical CD-Rs (labeled "Copy 1" and "Copy 2") under 37 C.F.R. §1.821(c) in place of the paper copy. The computer readable form of the Substitute Sequence Listing is submitted herewith on one (1) additional CD-R (labeled "Computer Readable Form") as required by §1.821(e). These three (3) files of the Substitute Sequence Listing file "2750-1026P.ST25" are identical and no way introduce new matter into the specification.

If the Primary Deposit Account No. 50-1055 is deficient and non-payment will result in a loss of rights, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By   
Mark J. Nuell #36,623  
P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachments: -Paper and Disk Copies of the Substitute Sequence Listing (3-CDs)



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/671,635	09/28/2000	Nickolai Alexandrov	2750-1026P

CONFIRMATION NO. 5385

2292

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

FORMALITIES LETTER



\*OC000000006574379\*

Date Mailed: 09/19/2001

**NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)***Filing Date Granted*

The U.S. Patent and Trademark Office has received your reply on to the Notice mailed and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

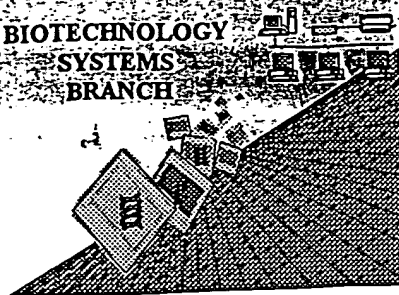
- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or [patin3help@uspto.gov](mailto:patin3help@uspto.gov)

*A copy of this notice **MUST** be returned with the reply.*

Customer Service Center  
Initial Patent Examination Division (703) 308-1202

**RAW SEQUENCE LISTING**  
**ERROR REPORT**

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/676,635A  
Source: 1645  
Date Processed by STIC: 6/20/2001

RECEIVED

JUL 11 2001

TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**  
**VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE. SEE BELOW:

**Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be down loaded from the USPTO website at the following address:**

**<http://www.uspto.gov/web/offices/pac/checker>**

RECEIVED

JUL 11 2001

## Raw Sequence Listing Error Summary

TECH CENTER 1600/2900

ERROR DETECTED    SUGGESTED CORRECTION

SERIAL NUMBER: 09/674,635A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics    The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length    The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino    The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4      Non-ASCII    The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5      Variable Length    Sequence(s)      contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0    A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid "bug"    sequences(s)     . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7      Skipped Sequences    Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
(OLD RULES)    (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                  (i)       SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
                  (xi)      SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                  This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8      Skipped Sequences    Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
(NEW RULES)    <210> sequence id number  
                  <400> sequence id number  
                  000
- 9      Use of n's or Xaa's    Use of n's and/or Xaa's have been detected in the Sequence Listing.  
(NEW RULES)    Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
                  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10      Invalid <213>    Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or  
      Response    scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or  
                  is Artificial Sequence
- 11      Use of <220>    Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses.  
                  Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or  
                  "Unknown." Please explain source of genetic material in <220> to <223> section.  
                  (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0    Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,  
      "bug"    resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence  
                  listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

RECEIVED

JUL 11 2001

1645

TECH CENTER 1600:2900

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/671,635A

DATE: 06/20/2001

TIME: 11:08:56 *pg 1-5*

Input Set : N:\COPIES\ES.txt

Output Set: N:\CRF3\06202001\I671635A.raw

Does Not Comply  
Corrected Diskette Needed

3 <110> APPLICANT: ALEXANDROV, Nickolai et al.  
5 <120> TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING  
POLYPEPTIDES ENCODED

6 THEREBY

8 &lt;130&gt; FILE REFERENCE: 2750-1026P

10 &lt;140&gt; CURRENT APPLICATION NUMBER: US 09/671,635A

11 &lt;141&gt; CURRENT FILING DATE: 2000-09-28

13 &lt;160&gt; NUMBER OF SEQ ID NOS: 802

15 &lt;170&gt; SOFTWARE: PatentIn version 3.0

17 &lt;210&gt; SEQ ID NO: 1

18 &lt;211&gt; LENGTH: 4

19 &lt;212&gt; TYPE: PRT

20 &lt;213&gt; ORGANISM: Consensus Sequence

22 &lt;400&gt; SEQUENCE: 1

24 Ala Gly Cys Asn

25 1

27 &lt;210&gt; SEQ ID NO: 2

28 &lt;211&gt; LENGTH: 4

29 &lt;212&gt; TYPE: PRT

30 &lt;213&gt; ORGANISM: Consensus Sequence

32 &lt;400&gt; SEQUENCE: 2

34 Ala Gly Ile Met

35 1

37 &lt;210&gt; SEQ ID NO: 3

38 &lt;211&gt; LENGTH: 4

39 &lt;212&gt; TYPE: PRT

40 &lt;213&gt; ORGANISM: Consensus Sequence

42 &lt;400&gt; SEQUENCE: 3

44 Ala Gly Leu Ile

45 1

47 &lt;210&gt; SEQ ID NO: 4

48 &lt;211&gt; LENGTH: 4

49 &lt;212&gt; TYPE: PRT

50 &lt;213&gt; ORGANISM: Consensus Sequence

52 &lt;400&gt; SEQUENCE: 4

54 Ala Gly Leu Met

55 1

57 &lt;210&gt; SEQ ID NO: 5

58 &lt;211&gt; LENGTH: 5

59 &lt;212&gt; TYPE: PRT

60 &lt;213&gt; ORGANISM: Consensus Sequence

62 &lt;400&gt; SEQUENCE: 5

64 Ala Gly Ser Cys Ile

65 1

67 &lt;210&gt; SEQ ID NO: 6

68 &lt;211&gt; LENGTH: 5

69 &lt;212&gt; TYPE: PRT

70 &lt;213&gt; ORGANISM: Consensus Sequence

*see item 10 on Error Summary Sheet  
(global error)*

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/671,635A

DATE: 06/20/2001  
TIME: 11:08:56

Input Set : N:\COPIES\ES.txt  
Output Set: N:\CRF3\06202001\I671635A.raw

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75 1 5  
77 <210> SEQ ID NO: 7  
78 <211> LENGTH: 4  
79 <212> TYPE: PRT  
80 <213> ORGANISM: Consensus Sequence  
82 <400> SEQUENCE: 7  
84 Ala Ile Val Pro  
85 1  
87 <210> SEQ ID NO: 8  
88 <211> LENGTH: 4  
89 <212> TYPE: PRT  
90 <213> ORGANISM: Consensus Sequence  
92 <400> SEQUENCE: 8  
94 Ala Leu Ile Val  
95 1  
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98 <211> LENGTH: 4  
99 <212> TYPE: PRT  
100 <213> ORGANISM: Consensus Sequence  
102 <400> SEQUENCE: 9  
104 Ala Pro Asn Thr  
105 1  
107 <210> SEQ ID NO: 10  
108 <211> LENGTH: 5  
109 <212> TYPE: PRT  
110 <213> ORGANISM: Consensus Sequence  
112 <400> SEQUENCE: 10  
114 Ala Ser Leu Val Arg  
115 1 5  
117 <210> SEQ ID NO: 11  
118 <211> LENGTH: 5  
119 <212> TYPE: PRT  
120 <213> ORGANISM: Consensus Sequence  
122 <400> SEQUENCE: 11  
124 Ala Ser Thr Asp Val  
125 1 5  
127 <210> SEQ ID NO: 12  
128 <211> LENGTH: 5  
129 <212> TYPE: PRT  
130 <213> ORGANISM: Consensus Sequence  
132 <400> SEQUENCE: 12  
134 Ala Ser Thr Pro Val  
135 1 5  
137 <210> SEQ ID NO: 13  
138 <211> LENGTH: 5  
139 <212> TYPE: PRT  
140 <213> ORGANISM: Consensus Sequence

## RAW SEQUENCE LISTING

DATE: 06/20/2001

PATENT APPLICATION: US/09/671,635A

TIME: 11:08:56

Input Set : N:\COPIES\ES.txt

Output Set: N:\CRF3\06202001\I671635A.raw

142 <400> SEQUENCE: 13  
144 Ala Val Asn His Lys  
145 1 5  
147 <210> SEQ ID NO: 14  
148 <211> LENGTH: 5  
149 <212> TYPE: PRT  
150 <213> ORGANISM: Consensus Sequence  
152 <400> SEQUENCE: 14  
154 Cys Ser Ala Gly Asn  
155 1 5  
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158 <211> LENGTH: 4  
159 <212> TYPE: PRT  
160 <213> ORGANISM: Consensus Sequence  
162 <400> SEQUENCE: 15  
164 Cys Ser Ala Met  
165 1  
167 <210> SEQ ID NO: 16  
168 <211> LENGTH: 4  
169 <212> TYPE: PRT  
170 <213> ORGANISM: Consensus Sequence  
172 <400> SEQUENCE: 16  
174 Cys Ser Ala Val  
175 1  
177 <210> SEQ ID NO: 17  
178 <211> LENGTH: 4  
179 <212> TYPE: PRT  
180 <213> ORGANISM: Consensus Sequence  
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187 <210> SEQ ID NO: 18  
188 <211> LENGTH: 6  
189 <212> TYPE: PRT  
190 <213> ORGANISM: Consensus Sequence  
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194 Cys Ser Thr Ala Glu Asn  
195 1 5  
197 <210> SEQ ID NO: 19  
198 <211> LENGTH: 5  
199 <212> TYPE: PRT  
200 <213> ORGANISM: Consensus Sequence  
202 <400> SEQUENCE: 19  
204 Asp Ala Gly His Glu  
205 1 5  
207 <210> SEQ ID NO: 20  
208 <211> LENGTH: 4  
209 <212> TYPE: PRT  
210 <213> ORGANISM: Consensus Sequence

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/671,635A

DATE: 06/20/2001  
TIME: 11:08:56

Input Set : N:\COPIES\ES.txt  
Output Set: N:\CRF3\06202001\I671635A.raw

212 <400> SEQUENCE: 20  
214 Asp Glu Ala Gly  
215 1  
217 <210> SEQ ID NO: 21  
218 <211> LENGTH: 4  
219 <212> TYPE: PRT  
220 <213> ORGANISM: Consensus Sequence  
222 <400> SEQUENCE: 21  
224 Asp Glu Ala Pro  
225 1  
227 <210> SEQ ID NO: 22  
228 <211> LENGTH: 5  
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230 <213> ORGANISM: Consensus Sequence  
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235 1 5  
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244 Asp Glu Gly Ser Thr His Lys Arg  
245 1 5  
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254 Asp Glu Lys Arg His Ser Thr Ala  
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258 <211> LENGTH: 4  
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262 <400> SEQUENCE: 25  
264 Asp Glu Asn Gly  
265 1  
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268 <211> LENGTH: 6  
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270 <213> ORGANISM: Consensus Sequence  
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274 Asp Glu Asn Lys Ala Cys  
275 1 5  
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278 <211> LENGTH: 6  
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280 <213> ORGANISM: Consensus Sequence



## RAW SEQUENCE LISTING

DATE: 06/20/2001

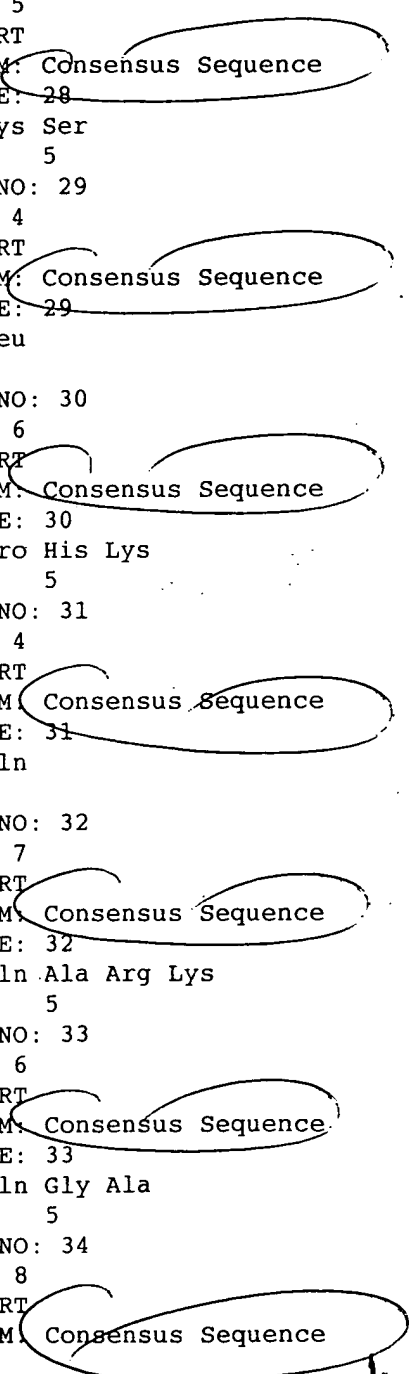
PATENT APPLICATION: US/09/671,635A

TIME: 11:08:56

Input Set : N:\COPIES\ES.txt

Output Set: N:\CRF3\06202001\I671635A.raw

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288 <211> LENGTH: 5  
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294 Asp Glu Asn Lys Ser  
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314 Asp Glu Asn Pro His Lys  
315 1 5  
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318 <211> LENGTH: 4  
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322 <400> SEQUENCE: 31  
324 Asp Glu Asn Gln  
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334 Asp Glu Asn Gln Ala Arg Lys  
335 1 5  
337 <210> SEQ ID NO: 33  
338 <211> LENGTH: 6  
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The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

VERIFICATION SUMMARY

DATE: 06/20/2001

PATENT APPLICATION: US/09/671,635A

TIME: 11:08:57

Input Set : N:\COPIES\ES.txt

Output Set: N:\CRF3\06202001\I671635A.raw